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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/402,244	
	Filing Date	September 29, 1999	
	First Named Inventor	Paul A. INSEL	
	Group Art Unit	5611	
	Examiner Name	To Be Assigned	
Total Number Of Pages In This Submission	12	Attorney Docket No.	220002058901 (Client Ref. (UC) 98-021-3)

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declarations	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input checked="" type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address - 4 pages	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	1. Certificate Under 37 C.F.R. § 3.73(b) for The Regents of the Univ. of California and copy of assignments - 4 pages
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	2. Certificate Under 37 C.F.R. § 3.73(b) for University of Cincinnati and copy of assignment - 3 pages
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	3. Return receipt postcard
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT	
Firm or Individual Name	Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, California 94304-1018
Individual Name	Debra J. Glaister (Registration No. 33,888) for Catherine M. Polizzi (Registration No. 40,130)
Signature	
Date	August 23, 2001

CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on August 23, 2001.
 Patricia Ellison

Burden Hours Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.



PATENT  
Docket No. 220002058901  
Client Ref. INSEL UC 98-021-3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Paul A. INSEL et al.

Serial No.: 09/402,244

371 Filing Date: September 29, 1999

For: METHODS AND COMPOSITIONS FOR  
IDENTIFYING VARIATIONS IN  
HUMAN  $\alpha_{1B}$ - AND  $\beta_2$ - ADRENERGIC  
RECEPTOR GENES

Examiner: To Be Assigned

Group Art Unit: 5611

**PROSECUTION BY ASSIGNEE AND POWER OF ATTORNEY  
UNDER 37 C.F.R. § 3.71**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

The Regents of the University of California, the co-assignee of the entire right, title and interest in this patent application, under 37 C.F.R. § 3.71 hereby appoints:

Laurie A. Axford (Reg No. 35,053)	Sanjay S. Bagade (Reg No. 42,280)
Joseph Barrera (Reg No. 44,522)	Erwin J. Basinski (Reg No. 34,773)
Shantanu Basu (Reg No. 43,318)	Richard R. Batt (Reg No. 43,485)
Frank P. Becking (Reg No. 42,309)	Vincent J. Belusko (Reg No. 30,820)
Kimberly A. Bolin (Reg No. 44,546)	Timothy J. Bortree (Reg No. 43,506)
Barry E. Bretschneider (Reg No. 28,055)	Tyler S. Brown (Reg No. 36,465)
Nicholas Buffinger (Reg No. 39,124)	Jingming Cai (Reg No. P-44,579)
Mark R. Carter (Reg No. 39,131)	Robert K. Cerpa (Reg No. 39,933)
Peng Chen (Reg No. 43,543)	Thomas Chuang (Reg No. P-44,616)
Thomas E. Ciotti (Reg No. 21,013)	Matthew M. D'Amore (Reg No. 42,457)
Raj S. Davé (Reg No. 42,465)	Stephen C. Durant (Reg No. 31,506)
Carolyn A. Favorito (Reg No. 39,183)	David L. Fehrman (Reg No. 28,600)
Hector Gallegos (Reg No. 40,614)	Debra J. Glaister (Reg No. 33,888)
Kenneth R. Glick (Reg No. 28,612)	Charles D. Holland (Reg No. 35,196)
Peter Hsieh (Reg No. P-44,780)	Madeline I. Johnston (Reg No. 36,174)
Richard D. Jordan (Reg No. 33,519)	Ararat Kapouytian (Reg No. 40,044)
Catherine J. Kara (Reg No. 41,106)	Richard C. Kim (Reg No. 40,046)
Kawai Lau (Reg No. 44,461)	Rimas T. Lukas (Reg No. 46,451)
Lisa E. Marks (Reg No. 44,901)	Gladys H. Monroy (Reg No. 32,430)
Philip A. Morin (Reg No. P-45,926)	Kate H. Murashige (Reg No. 29,959)

Martin M. Noonan (Reg No. 44,264)  
William C. Revelos (Reg No. 42,101)  
Robert Saltzberg (Reg No. 36,910)  
Terri Shieh-Newton (Reg No. P-47,081)  
Kevin R. Spivak (Reg No. 43,148)  
E. Thomas Wheelock (Reg No. 28,825)  
Thomas G. Wiseman (Reg No. 35,046)  
David T. Yang (Reg No. 44,415)  
George C. Yu (Reg No. 44,418)

Catherine M. Polizzi (Reg No. 40,130)  
Paul J. Riley (Reg No. 38,596)  
Debra A. Shetka (Reg No. 33,309)  
Rebecca Shortle (Reg No. P47,083)  
Stanley H. Thompson (Reg No. 45,160)  
Todd W. Wight (Reg No. 45,218)  
Frank Wu (Reg No. 41,386)  
Peter J. Yim (Reg No. 44,417)  
Karen R. Zachow (Reg No. P-46,332)

all of Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, California 94304-1018, telephone (650) 813-5600, to prosecute this application and transact all matters in the United States Patent and Trademark Office connected therewith, said appointment to be to the exclusion of the inventors and their attorneys in accordance with the provisions of 37 C.F.R. § 3.71 provided that if any one of said attorneys or agents ceases being affiliated with the law firm of Morrison & Foerster as partner, employee or of counsel, such attorney's or agent's appointment as attorney or agent and all powers derived therefrom shall terminate on the date such attorney or agent ceases being so affiliated.


Please direct all written communications relative to this application to:

Catherine M. Polizzi  
Morrison & Foerster LLP  
755 Page Mill Road  
Palo Alto, California 94304-1018

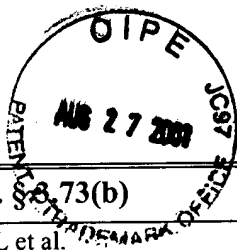
Please direct all telephone communications to Catherine M. Polizzi at (650) 813-5651.

The Regents of the University of California  
a (non-profit) university

Dated: 8/1, 2001



Name: Linda S. Stevenson  
Title: Manager, Patent Prosecution  
Address: 1111 Franklin Street, 5th Floor, Oakland,  
California 94607-5200



PTO/SB/96 (10-92)

## CERTIFICATE UNDER 37 C.F.R. § 8.73(b)

Docket No. 220002058901

In the application of: Paul A. INSEL et al.  
Serial No.: 09/402,244  
371 Filed: September 29, 1999  
For: METHODS AND COMPOSITIONS FOR IDENTIFYING VARIATIONS IN HUMAN  $\alpha_1\beta_2$ -  
AND  $\beta_2$ -ADRENERGIC RECEPTOR GENES

The Regents of the University of California, a university, certifies that it is the co-assignee of the entire right, title and interest in the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application identified above for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From :  
To:  
The document was recorded in the Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached.
2. From :  
To:  
The document was recorded in the Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached.
3. From :  
To:  
The document was recorded in the Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

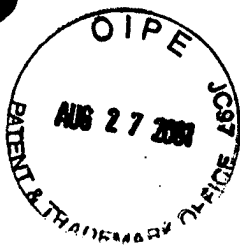
The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: 8/1/2001

Linda S. Stevenson  
Name: Linda Stevenson  
Title: Manager, Patent Prosecution



COPY

PATENT  
Docket No. 210002050901  
Client Ref. INSEL UC 98-021-3

## ASSIGNMENT

U.C. Case No. INSEL UC 98-021-3

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

1. Paul A. INSEL
2. Volker HERRMANN
3. Rainer BUESCHER

hereby sells, assigns and transfers to ASSIGNEE, The Regents of the University of California, a California Corporation, having its statewide administrative offices located 1111 Franklin Street, Twelfth Floor, Oakland, CA 94607-5200, and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention entitled:

### METHODS AND COMPOSITIONS FOR IDENTIFYING VARIATIONS IN HUMAN $\alpha_1$ AND $\beta_2$ ADRENERGIC RECEPTOR GENES

and which is found in

- (a) \_\_\_\_\_ U.S. provisional application filed herewith and listing the above named persons as inventors
- (b) \_\_\_\_\_ U.S. patent application filed herewith and listing the above named persons as inventors
- (c) ☒ U.S. application serial no. 09/402,244 filed on September 29, 1999
- (d) \_\_\_\_\_ U.S. Patent No.: \_\_\_\_\_, issued \_\_\_\_\_

and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension, conversion to 35 USC 111(e) or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly create and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, The Regents of the University of California.

executed this  
31 day of July, 2001

Signature of Inventor(s)  
  
Paul A. INSEL

\_\_\_\_ day of \_\_\_\_\_, 2001

Volker HERRMANN

\_\_\_\_ day of \_\_\_\_\_, 2001

Rainer BUESCHER

COPY

PATENT  
Docket No. 220002058901  
Class Ref. INSEL UC 98-021-3

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METHODS AND COMPOSITIONS FOR IDENTIFYING VARIATIONS IN HUMAN  $\alpha_1$  AND  $\beta_2$  ADRENERGIC RECEPTOR GENES

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executed this

\_\_\_\_\_ day of \_\_\_\_\_, 2001

01 day of August, 2001

\_\_\_\_\_ day of \_\_\_\_\_, 2001

Signature of Inventor(s)

Paul A. INSEL

Volker HERRMANN

Rainer BUESCHER

COPY

PATENT

Docket No. 220002058901

Class. Ref. INSEL UC 98-021-3

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U.C. Case No. INSEL UC 98-021-3

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executed this

Signature of Inventor(s)

\_\_\_\_ day of \_\_\_\_\_, 2001

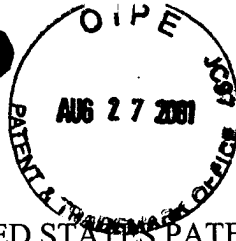
Paul A. INSEL

\_\_\_\_ day of \_\_\_\_\_, 2001

Volker HERRMANN

31 day of July, 2001

Rainer BUESCHER



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Paul A. INSEL et al.

Serial No.: 09/402,244

Filing Date: September 29, 1999

For: METHODS AND COMPOSITIONS FOR  
IDENTIFYING VARIATIONS IN  
HUMAN  $\alpha_{1B}$ - AND  $\beta_2$ - ADRENERGIC  
RECEPTOR GENES

Examiner: Not Yet Assigned

Group Art Unit: 5611

**PROSECUTION BY ASSIGNEE AND POWER OF ATTORNEY  
UNDER 37 C.F.R. § 3.71**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

University of Cincinnati, the co-assignee of the entire right, title and interest in this patent application, under 37 C.F.R. § 3.71 hereby appoints:

Laurie A. Axford (Reg No. 35,053)  
Joseph Barrera (Reg No. 44,522)  
Shantanu Basu (Reg No. 43,318)  
Frank P. Becking (Reg No. 42,309)  
Kimberly A. Bolin (Reg No. 44,546)  
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Richard D. Jordan (Reg No. 33,519)  
Catherine J. Kara (Reg No. 41,106)  
Kawai Lau (Reg No. 44,461)  
Lisa E. Marks (Reg No. 44,901)  
Philip A. Morin (Reg No. P-45,926)  
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Vincent J. Belusko (Reg No. 30,820)  
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Rimas T. Lukas (Reg No. 46,451)  
Gladys H. Monroy (Reg No. 32,430)  
Kate H. Murashige (Reg No. 29,959)  
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Robert Saltzberg (Reg No. 36,910)  
Terri Shieh-Newton (Reg No. P-47,081)  
Kevin R. Spivak (Reg No. 43,148)  
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Peter J. Yim (Reg No. 44,417)  
Karen R. Zachow (Reg No. P-46,332)

all of Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, California 94304-1018,  
telephone (650) 813-5600, to prosecute this application and transact all matters in the United  
States Patent and Trademark Office connected therewith, said appointment to be to the exclusion  
of the inventors and their attorneys in accordance with the provisions of 37 C.F.R. § 3.71  
provided that if any one of said attorneys or agents ceases being affiliated with the law firm of  
Morrison & Foerster as partner, employee or of counsel, such attorney's or agent's appointment  
as attorney or agent and all powers derived therefrom shall terminate on the date such attorney or  
agent ceases being so affiliated.

Please direct all written communications relative to this application to:

Catherine M. Polizzi  
Morrison & Foerster LLP  
755 Page Mill Road  
Palo Alto, California 94304-1018

Please direct all telephone communications to Catherine M. Polizzi at (650) 813-5651.

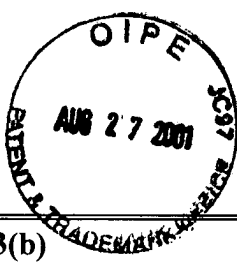
Dated: 11/8, 2000

University of Cincinnati  
a (non-profit) university



Name: JAMES E. WESNER  
Title: AS CONTRACTING OFFICER

Address: University of Cincinnati,  
Cincinnati, Ohio 45267-0829



PTO/SB/96 (10-92)

**CERTIFICATE UNDER 37 C.F.R. § 3.73(b)**

Docket No. 220002058901

In the application of: Paul A. INSEL et al.  
Serial No.: 09/402,244  
Filed: September 29, 1999  
For: METHODS AND COMPOSITIONS FOR IDENTIFYING VARIATIONS IN HUMAN  $\alpha_{1B}$ -  
AND  $\beta_2$ -ADRENERGIC RECEPTOR GENES

University of Cincinnati, a university, certifies that it is the co-assignee of the entire right, title and interest in the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application identified above for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From :  
To:  
The document was recorded in the Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached.

2. From :  
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The document was recorded in the Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached.

3. From :  
To:  
The document was recorded in the Patent and Trademark Office at Reel , Frame , or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Dated: 11-7-00

  
Name: JAMES E. WESNER  
Title: AS CONTRACTING OFFICER

COPY

ASSIGNMENT OF INVENTION AND PATENTS THEREON

WHEREAS, I, Stephen B. Liggett, in the County of Hamilton, and State of Ohio, (hereinafter referred to as "ASSIGNOR"), have invented "Methods and Compositions For Identifying Variations In Human  $\alpha_{1B}$ - and  $\beta_2$ - Adrenergic Receptor Genes," for which an application for Letters Patent of the United States, and which U.S. application was filed on September 29, 1999, and assigned Serial No. 09/402,244; and

WHEREAS, UNIVERSITY OF CINCINNATI, a state university of the State of Ohio organized under R.C. Chapter 3361 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire interest in and to the subject matter disclosed in said application and to all patents issued or to be issued thereon:

NOW, THEREFORE, in for good and valuable consideration, the receipt of which is hereby acknowledged, I, the said ASSIGNOR, hereby sell, assign, and transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said invention, and the said United States application and all regular applications, divisions, renewals, and continuations thereof, and all Patents of the United States which may be granted thereon and all reissues, reexaminations and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, the International Patent Cooperative Union, the European Patent Convention, the Common Market Convention, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models and designs, which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals, reexaminations and reissues thereof;

ASSIGNOR HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

I, the said ASSIGNOR, HEREBY covenant and agree that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

ASSIGNOR HEREBY further covenants and agrees to communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue, reexamination and foreign applications, make all rightful oaths, and generally

do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

Witness my hand this 31<sup>st</sup> day of October, 2000.

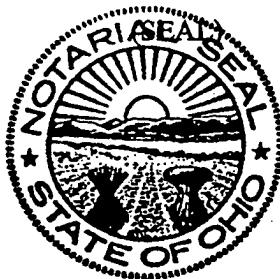
COPY

Stephen B. Liggett  
Stephen B. Liggett  
Inventor

STATE OF Ohio )  
COUNTY OF Clermont ) SS:

On this 31<sup>st</sup> day of October, 2000, before me personally appeared Stephen B. Liggett, known by me to be the above-named individual, who duly acknowledged the signing of the foregoing instrument to be a voluntary act and deed and who executed the same for the uses and purposes therein specified.

Mary Ann Rosensweet  
Notary Public



MARY ANN ROSENSWEET  
Notary Public, State of Ohio  
My Commission Expires  
February 6, 2005